

Weekly COVID-19 Update in Montana (as of 7/22/2022)

This report is a weekly snapshot of COVID-19 activity in Montana. Data are analyzed based on information available as of July 22, 2022. Data are provisional and expected to change as more information is received.

Case Data

Table 1. Summary of COVID-19 Activity – Montana, as of 7/22/2022

	TOTAL	RECENT WEEK	PERCENT CHANGE FROM PREVIOUS WEEK
REPORTED CASES	295,492	2,247	-12%
LABORATORY TESTS	2,927,242	12,007	-4%
HOSPITALIZATIONS	12,709	106	+1%
DEATHS	3,469	9	+80%

Figure 1. COVID-19 Cases and Hospitalizations over Time – Montana, as of 7/22/2022

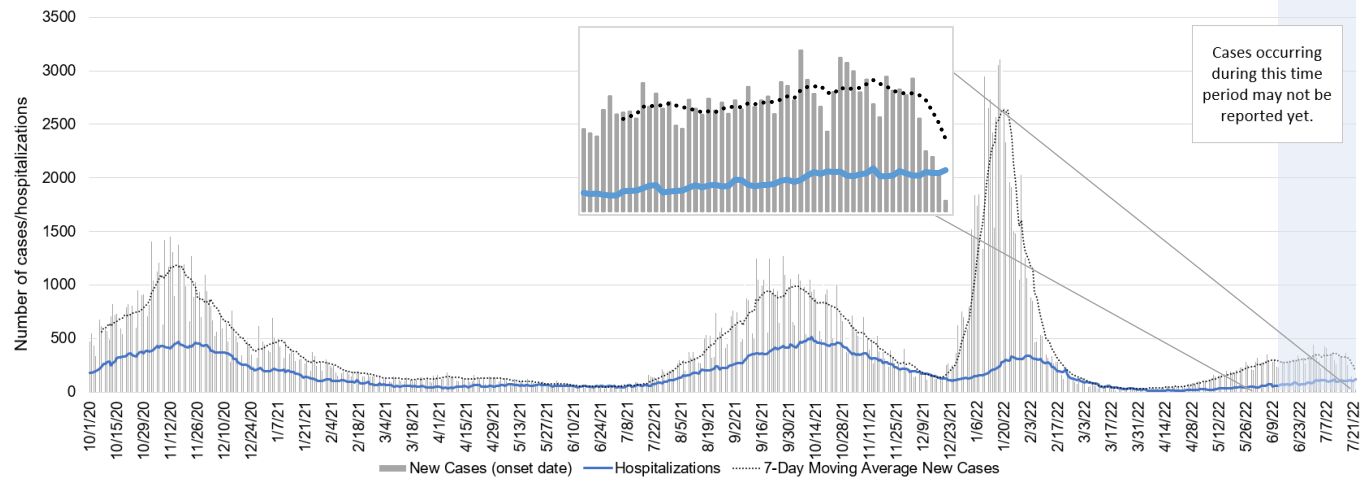


Figure 2: Status of Acute Care and ICU Beds – Hospitals in Montana, 7/13-7/26 2022

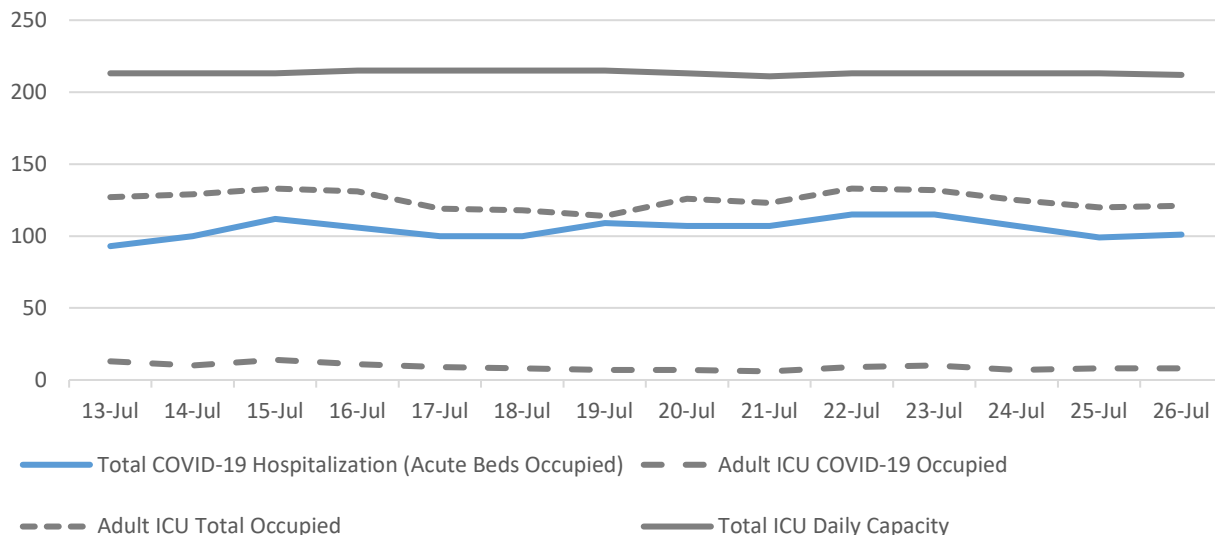
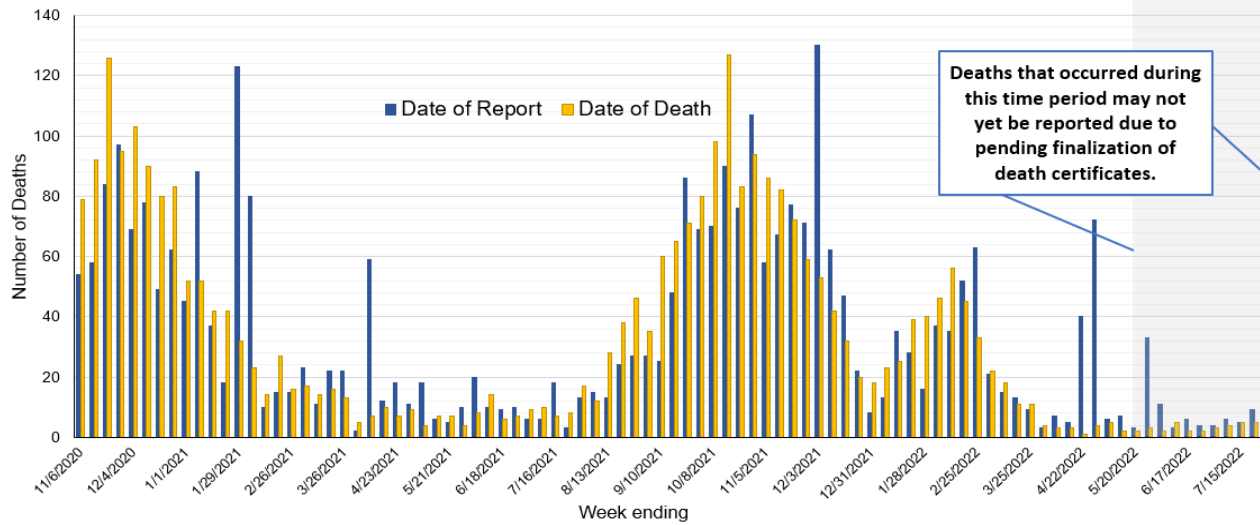


Figure 3. COVID-19 Deaths by Report Date and Date of Death – Montana, 11/1/2020 – 7/22/2022



Vaccine Data

Montana began vaccinating individuals in mid-December 2020 with a phased process: Phase 1A on December 14, 2020, Phase 1B on January 19, 2021, and Phase 1B+ on March 8, 2021. Vaccinations were opened to all Montanans age 16+ on April 1, 2021, and expanded to all Montanans age 12+ on May 10th, 2021. The Pfizer vaccine was approved for the 5–11 year-old age group on October 29th, 2021. The Pfizer and Moderna vaccines were approved for all Montanans aged 6 months and older on June 18, 2022. To date, 1,518,837 doses have been given across the state and 53% of the eligible population is considered fully vaccinated (table 2).

Table 2: COVID-19 Vaccine Doses Administered, 0+ years-old – Montana, as of 7/22/2022

	NUMBER	PERCENT OF ELIGIBLE POPULATION	WEEK ENDING 7/8	WEEK ENDING 7/15	WEEK ENDING 7/22*
TOTAL DOSES ADMINISTERED	1,518,837		3,016	4,571	4,146
DOSE 1 ADMINISTERED	642,601	59%	666	820	706
FULLY VACCINATED INDIVIDUALS	570,384	53%	296	375	454

*The data for the most recent week are preliminary and are expected to be an underestimate of the doses administered during the week, due to a reporting lag.

Figure 4. COVID-19 Vaccine Doses Administered by Week, 0+ years-old – Montana, as of 7/22/2022

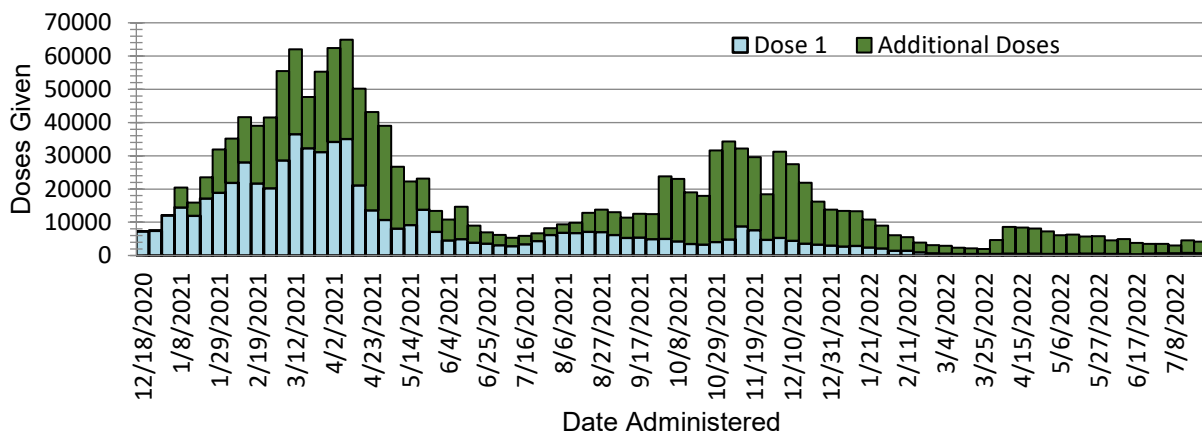
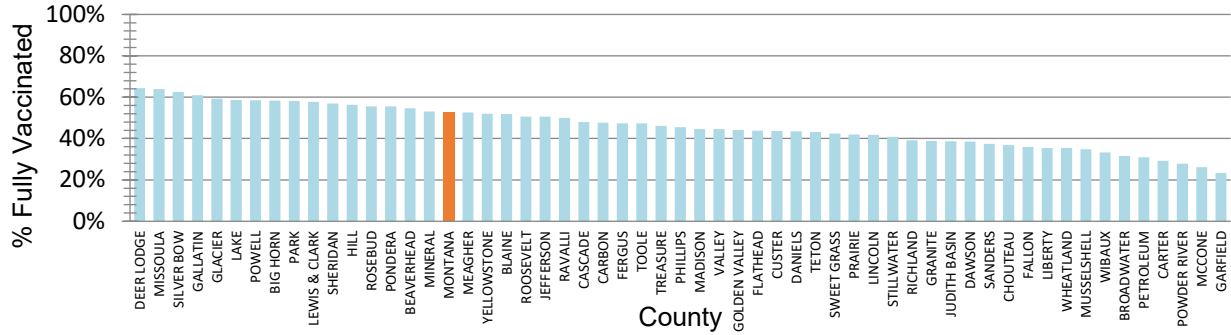


Figure 5. Percent of Eligible Montanans (0+ years-old) Fully Vaccinated by County – Montana, 7/22/2022



Variant and Breakthrough Cases

Figure 6 displays the number of Montana samples sequenced by week. Figure 7 displays the percentage of the most common SARS-CoV-2 lineages detected out of all Montana samples sequenced by week. There have been 17,256 samples from Montana that have been sequenced with their lineages reported to GISAID since September 2020. Please note the relatively small number of samples sequenced in recent weeks limits interpretation of the available variant sequencing data.

As of July 23, there have been 4,847 cases of COVID across Montana infected with Omicron variants. DPHHS is monitoring sublineages of the Omicron variant, including BA.2 (pink, below) and BA.2.12.1 (gold, below). Newer Omicron subvariants include BA.4 (light blue, below) first identified in Montana on May 4, 2022 and BA.5 (green, below) which was first identified in Montana on May 31, 2022. There have been 136 sequences reported to GISAID from positive samples collected in the last four weeks—71 (52%) BA.5, 37 (27%) BA.2.12.1, 25 (18%) BA.4, and 3 (2%) as BA.2. There were 14 samples collected the week ending July 16, 2022, that were sequenced and reported to GISAID, but no samples reported to GISAID from the week ending July 23.

Figure 6. Number of COVID-19 samples sequenced by collection date, Montana 7/23/2022

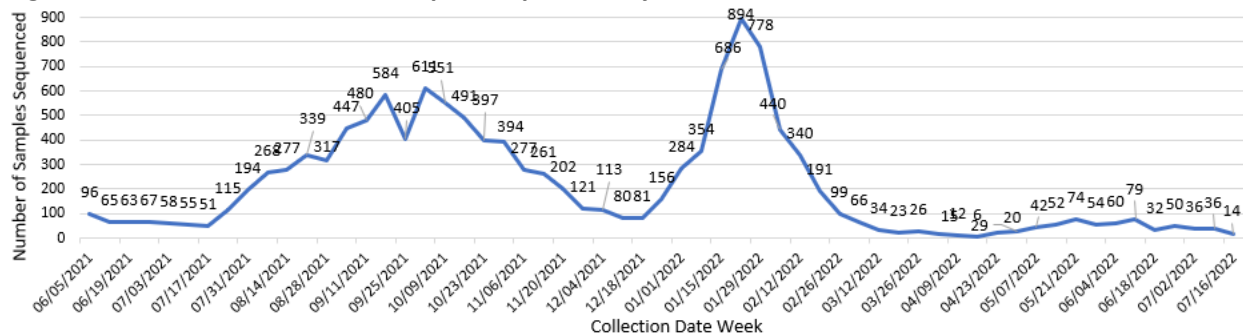
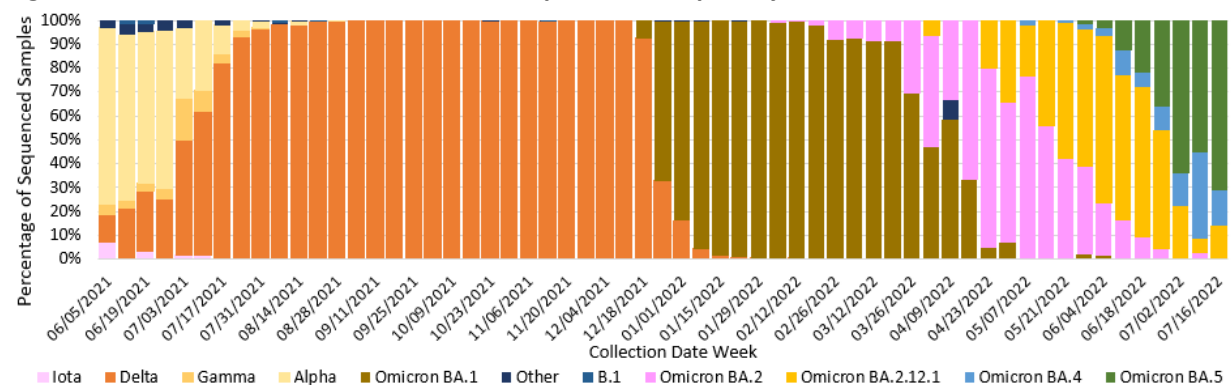


Figure 7. Percent of COVID-19 variants in sequenced samples by collection date, Montana 7/23/2022



A breakthrough COVID-19 infection is defined as a positive SARS-CoV-2 specimen collected ≥ 14 days after completing the primary COVID-19 vaccine series of an FDA-authorized COVID-19 vaccine. Studies show that protection from COVID vaccination decreases over time; in response, the CDC has recommended booster doses for eligible populations to protect against waning immunity. As of July 22, 2022, Montana reports 53,585 cases of confirmed breakthrough disease, which includes 1,852 hospitalizations and 449 deaths. CDC data from May 2022 show that unvaccinated individuals aged 5 years and older were 2 times more likely to become infected with COVID-19, compared to individuals vaccinated with at least a primary series in the same age group. Additionally, unvaccinated individuals 5 and older had 6 times the risk of dying from COVID-19 compared to individuals vaccinated with at least a primary series in the same age group.¹

Hospitalizations and Deaths and Vaccination Status

COVID-19-related hospitalizations and deaths were analyzed between **April 1, 2021 and July 22, 2022** to review vaccination status. Since the beginning of April 2021, 76% of Montanans who were hospitalized and 76% of those who died were unvaccinated at the time of infection (Table 3). Of the 7,868 individuals who were hospitalized during this time period, 161 (2%) were <18 years old, 1,058 (13%) were 18 to 44 years old, 2,455 (31%) were 45 to 64 years old and 4,194 (53%) were ≥ 65 years old.

Additionally, COVID-19-related hospitalization and death data from **May 28 – July 22, 2022** (last 8 weeks) were analyzed to review vaccination status. Fifty-one percent of Montanans who were hospitalized and 57% of those who died had not received a COVID-19 vaccine (Table 4)[†]. Of the 637 individuals who were hospitalized during this time period, 17 (3%) were <18 years old, 73 (12%) were 18 to 44 years old, 119 (19%) were 45 to 64 years old and 428 (67%) were ≥ 65 years old.

Table 3. Vaccination status of COVID-19 hospitalizations and deaths – April 1, 2021 to July 22, 2022

	HOSPITALIZATIONS	DEATHS
TOTAL REPORTED	7,868	1,867
UNVACCINATED	6,016 (76%)	1,418 (76%)
VACCINATED (BREAKTHROUGH CASE)	1,852 (24%)	449 (24%)
UNVACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	<1-102 (63)	<1-103 (71)
VACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	6-103 (74)	20-102 (81)

Table 4. Vaccination status of COVID-19 hospitalizations and deaths – May 28 to July 22, 2022

	HOSPITALIZATIONS	DEATHS
TOTAL REPORTED	637	28
UNVACCINATED	324 (51%)	16 (57%)
VACCINATED (BREAKTHROUGH CASE)	313 (49%)	12 (43%)
UNVACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	<1-98 (69)	61-100 (80)
VACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	6-99 (75)	72-102 (81)

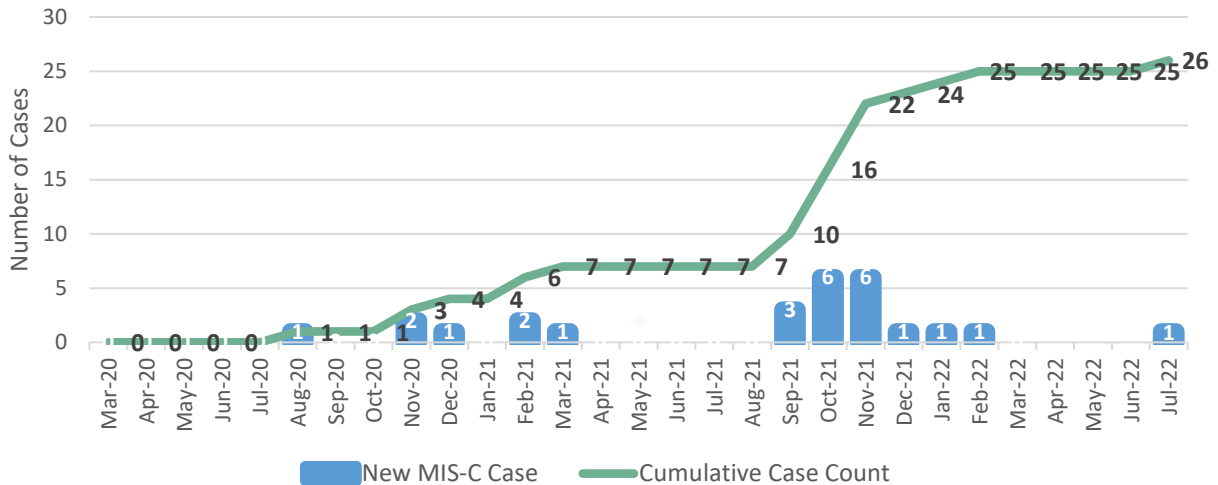
[†]The analysis of hospitalizations and deaths by vaccination status does not include data on booster doses. Booster doses are recommended by the CDC and have been shown to improve protection against death from COVID-19¹.

¹ CDC – COVID Data Tracker – Rates of COVID-19 Cases and Deaths by Vaccination Status. <https://covid.cdc.gov/covid-data-tracker/#rates-by-vaccine-status>. July 26, 2022.

Multisystem Inflammatory Syndrome in Children (MIS-C)

As of July 22, 2022, there have been a total of 26 cases of multisystem inflammatory syndrome in children, or MIS-C, reported in Montana. There have been no deaths. Ages range from less than 1 year to 20 years old; median is 8 years. Twelve cases were female, 14 were male. Cases are from 13 counties around Montana. The first case of MIS-C was reported in August 2020; 19 of the 26 cases have been reported since September 2021 (Figure 8).

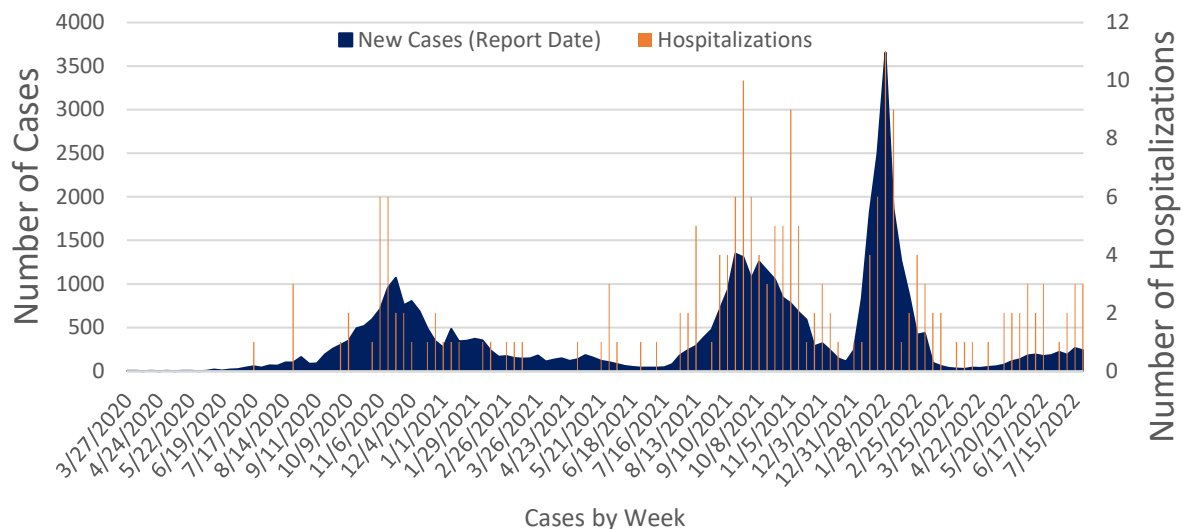
Figure 8. Montana MIS-C Cases by Month of Onset, March 2020 – July 2022



Cases and Hospitalizations Associated with COVID-19 Among Children

To date, there have been 45,075 children <18 years old in Montana diagnosed with COVID-19. Of those, 197 (<1%) have been hospitalized. Case rates among children follow a similar pattern to COVID-19 cases among all age groups (see Figure 1 for comparison) and increased sharply during the recent Omicron surge (Figure 9). There were 240 cases of COVID-19 in children reported during the week of July 16 – July 22, 2022, which is a 10% decrease in cases among that age group compared to the previous week. Three hospitalizations in children were reported that week.

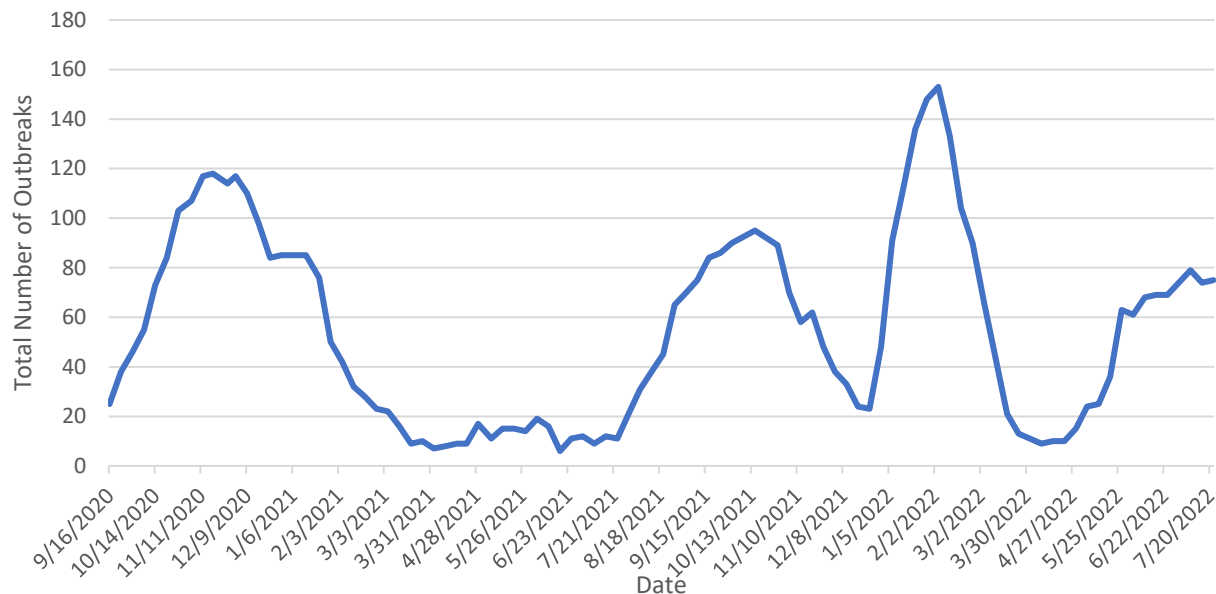
Figure 9. COVID-19 Cases and Hospitalizations by Week, March 2020 – July 22, 2022, Children <18



Assisted Living Facility and Long Term Care Facility Cases and Hospitalizations

There are 71 long-term care facilities (LTCFs) and 211 assisted living facilities (ALFs) in Montana. As of July 22, 2022, there have been 12,552 cases associated with ALFs and LTCFs since the beginning of the pandemic, which comprises 4% of the total number of COVID-19 cases Montana has reported. There have been 656 COVID-related deaths associated with ALFs and LTCFs in Montana, which accounts for 19% of the COVID-related deaths that Montana has reported since the beginning of the pandemic. Facilities that have identified a case of COVID-19 in a resident or staff member within the last 14 days are considered to be actively responding to an outbreak. There were 75 LTCFs and ALFs that were actively responding to a COVID outbreak as of July 22, 2022, which is a 1% increase in active outbreaks among ALFs and LTCFs compared to the previous week (Figure 10).

Figure 10. Montana ALF and LTCF Outbreaks by Week, September 2020-July 2022



Reported COVID-19 Cases by County with Trendline – Montana, past 6 weeks

County	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	change from previous week*	Trendline
Beaverhead	18	25	12	7	22	15	-7	
Big Horn	7	14	19	31	20	27	7	
Blaine	7	6	12	9	19	35	16	
Broadwater	9	3	14	3	8	19	11	
Carbon	10	10	12	14	27	16	-11	
Carter	1	1	0	3	2	0	-2	
Cascade	130	178	194	228	287	189	-98	
Chouteau	7	7	13	17	14	11	-3	
Custer	10	10	7	10	11	30	19	
Daniels	0	2	4	4	1	3	2	
Dawson	12	9	7	16	24	22	-2	
Deer Lodge	28	38	37	29	28	22	-6	
Fallon	4	1	3	4	1	2	1	
Fergus	17	5	12	8	14	16	2	
Flathead	234	208	212	246	246	161	-85	
Gallatin	261	303	290	266	301	293	-8	
Garfield	2	4	0	0	0	0	0	
Glacier	32	26	9	26	32	22	-10	
Golden Valley	0	0	0	0	0	2	2	
Granite	7	3	7	11	6	9	3	
Hill	19	25	29	20	29	25	-4	
Jefferson	25	32	26	38	27	23	-4	
Judith Basin	3	1	2	1	6	1	-5	
Lake	78	83	59	78	83	46	-37	
Lewis and Clark	177	204	182	214	218	228	10	
Liberty	10	6	6	2	1	2	1	
Lincoln	27	21	43	36	51	35	-16	
Madison	21	23	33	32	41	25	-16	
McCone	1	3	0	4	1	4	3	
Meagher	9	2	2	4	14	5	-9	

County	17-Jun	24-Jun	1-Jul	8-Jul	15-Jul	22-Jul	change from previous week*	Trendline
Mineral	13	18	12	16	8	9	1	
Missoula	249	268	383	286	302	257	-45	
Musselshell	5	9	6	1	1	15	14	
Park	43	33	59	52	40	32	-8	
Petroleum	0	0	0	0	0	0	0	
Phillips	1	8	8	1	5	2	-3	
Pondera	5	8	6	22	18	8	-10	
Powder River	1	3	0	3	6	5	-1	
Powell	8	11	19	14	37	21	-16	
Prairie	2	0	0	2	0	1	1	
Ravalli	48	43	53	53	73	45	-28	
Richland	15	8	9	6	13	7	-6	
Roosevelt	10	8	12	12	19	7	-12	
Rosebud	11	5	21	12	23	26	3	
Sanders	14	6	10	13	13	6	-7	
Sheridan	4	9	3	12	5	10	5	
Silver Bow	86	69	71	55	51	48	-3	
Stillwater	8	6	7	7	5	3	-2	
Sweet Grass	2	2	8	7	2	5	3	
Teton	7	8	16	21	17	10	-7	
Toole	6	6	9	7	4	8	4	
Treasure	0	0	0	1	1	0	-1	
Valley	14	11	18	35	23	38	15	
Wheatland	0	2	5	7	3	0	-3	
Wibaux	0	0	0	0	0	1	1	
Yellowstone	247	251	316	296	362	395	33	
MONTANA	1965	2045	2297	2302	2565	2247	-318	

*Note: Data are based on the date of report into the Montana Infectious Disease Information System (MIDIS). Underlined numbers in the above table reflect adjusted counts and may include cases diagnosed but not reported in earlier time frames. These adjustments result from local and state data reconciliation efforts, conducted to ensure accurate data.

County name	Eligible population 0+	Dose 1	Fully Immunized	Total Doses Administered	Percent eligible with first dose (0+)	Percent Fully Vaccinated (0+)
BEAVERHEAD	9,483	5,568	5,173	13,190	59%	55%
BIG HORN	13,063	8,361	7,611	19,012	64%	58%
BLAINE	6,568	3,794	3,402	8,897	58%	52%
BROADWATER	6,444	2,426	2,032	5,455	38%	32%
CARBON	10,921	5,649	5,200	13,812	52%	48%
CARTER	1,235	382	361	931	31%	29%
CASCADE	81,346	43,706	38,963	101,373	54%	48%
CHOUTEAU	5,699	2,267	2,103	5,757	40%	37%
CUSTER	11,292	5,421	4,919	12,644	48%	44%
DANIELS	1,638	745	712	1,814	45%	43%
DAWSON	8,555	3,590	3,294	8,600	42%	39%
DEER LODGE	9,204	6,452	5,925	15,963	70%	64%
FALLON	2,826	1,089	1,016	2,601	39%	36%
FERGUS	11,104	5,593	5,257	14,065	50%	47%
FLATHEAD	105,851	53,418	46,312	124,307	50%	44%
GALLATIN	116,806	84,368	71,280	192,898	72%	61%
GARFIELD	1,268	318	297	686	25%	23%
GLACIER	13,594	10,650	8,057	22,226	78%	59%
GOLDEN VALLEY	827	396	365	929	48%	44%
GRANITE	3,317	1,473	1,288	3,468	44%	39%
HILL	16,358	10,051	9,224	22,929	61%	56%
JEFFERSON	12,360	6,854	6,246	17,006	55%	51%
JUDITH BASIN	1,994	820	770	2,013	41%	39%
LAKE	30,986	20,468	18,161	49,076	66%	59%
LEWIS & CLARK	70,229	46,206	40,509	111,874	66%	58%
LIBERTY	2,369	867	841	2,180	37%	36%
LINCOLN	20,343	9,591	8,504	22,938	47%	42%
MADISON	8,959	4,481	3,998	10,746	50%	45%
MCCONE	1,648	454	432	1,172	28%	26%
MEAGHER	1,831	1,018	963	2,538	56%	53%
MINERAL	4,544	2,657	2,414	6,185	58%	53%
MISSOULA	121,630	86,152	77,695	209,818	71%	64%
MUSSELSHELL	4,669	1,751	1,628	4,084	38%	35%
PARK	16,760	11,346	9,752	26,459	68%	58%
PETROLEUM	500	166	155	407	33%	31%
PHILLIPS	3,919	1,928	1,785	4,497	49%	46%
PONDERA	5,782	3,600	3,211	8,234	62%	56%
POWDER RIVER	1,681	506	469	1,187	30%	28%
POWELL	6,817	4,273	3,984	9,776	63%	58%
PRAIRIE	1,067	471	447	1,207	44%	42%
RAVALLI	45,002	24,881	22,508	60,731	55%	50%
RICHLAND	11,043	4,587	4,323	10,485	42%	39%
ROOSEVELT	10,964	6,178	5,544	13,619	56%	51%
ROSEBUD	8,836	5,495	4,914	12,658	62%	56%
SANDERS	12,157	5,100	4,547	12,285	42%	37%
SHERIDAN	3,261	1,960	1,855	5,021	60%	57%
SILVER BOW	35,180	24,116	22,005	59,682	69%	63%
STILLWATER	9,888	4,404	4,043	10,460	45%	41%
SWEET GRASS	3,684	1,724	1,561	4,066	47%	42%
TETON	6,249	3,151	2,693	6,978	50%	43%
TOOLE	4,686	2,381	2,217	5,207	51%	47%
TREASURE	695	436	321	929	63%	46%
VALLEY	7,359	3,461	3,281	8,453	47%	45%
WHEATLAND	2,157	820	765	2,023	38%	35%
WIBAUX	939	366	313	833	39%	33%
YELLOWSTONE	162,990	94,215	84,739	222,453	58%	52%
MONTANA	1,080,577	642,601	570,384	1,518,837	59%	53%